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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,403	01/22/2004	Shashikant Prasad	U 015002-5	4537

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EXAMINER

LEPISTO, RYAN A

ART UNIT	PAPER NUMBER
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2883

DATE MAILED: 10/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/763,403

Applicant(s)

PRASAD ET AL.

Examiner

Ryan Lepisto

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 October 2006.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5-12, 14, 15 and 17-23 is/are pending in the application.  
4a) Of the above claim(s) 12, 14, 15 and 17-22 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-3, 5-7, 10, 11 and 23 is/are rejected.  
7) ☒ Claim(s) 8 and 9 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 22 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of the species requirement in the reply filed on 10/10/06 is acknowledged. The traversal is on the ground(s) that the inventions are closely related and contain the same identical structure with the exception of an additional cladding layer. This is not found persuasive because the common structure of the species is not the special technical features of the inventions. The common structure of the claims is a fiber with a center core, cladding, ring core and outer glass region wherein the cladding is split between an inner cladding between the center core and ring core and a outer cladding between the ring core and outer glass region. This structure is well known in the art and therefore is not patentably distinct subject matter. The special technical features are the refractive index relationships between the different structural components, which differ between the two claims. The claims do not even compare the same components in the two claims and therefore these limitations are mutually exclusive and deem the species requirement proper

The requirement is still deemed proper and is therefore made FINAL.

**Claims 12, 14-15 and 17-22** are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 10/10/06.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

**Claims 1-3, 5-7, 10-11 and 23** are rejected under 35 U.S.C. 102(a) as being anticipated by **Changdar et al (WO 02/088803 A2)** (Changdar). Changdar teaches a dispersion optimized fiber for low dispersion, low micro-bending loss and optimized effective area in the C and L band transmissions (page 1 lines 7-14) (Fig. 2a) comprising (from the center to the outer layer in order) a center core region (1), an inner cladding region (2 with 3) of germanium and fluorine doped material (page 12 lines 3-5), a ring core region (4) and a outer glass region (5) wherein the refractive indices of the regions (1-5, respectively) have the relationship  $n_1 > n_4 > n_5 > (n_2 \text{ and } n_3)$  (page 9 lines 9-13), a dispersion slope less than 0.08 ps/nm<sup>2</sup>km (0.05 or less, page 12 line 15), radiuses of each layer (center core, cladding and ring core, respectively) about 2.7, 6.3 and 8.8 a  $\mu\text{m}$  (2.8, 6.3 and 9.2  $\mu\text{m}$ , page 10 lines 6-9) since the term “about” is not defined in the specification, within 1  $\mu\text{m}$  is considered “about”, attenuation less than 0.22 (page 12 line 12), dispersion at 1530 to 1565 nm is 2.2 to 6.0 ps/nm<sup>2</sup>km (2.5 to 6.0 ps/nm<sup>2</sup>km, page 12 line 13), dispersion at 1565 to 1625 nm is 4.0 to 11 ps/nm<sup>2</sup>km (3.9 to 8.6 ps/nm<sup>2</sup>km, page 12 line 14), micro-bending less than 0.05 dB (page 12 line 21), macro-bending less than 0.5 (page 12 line 22).

Changdar teaches a further embodiment (Fig. 3a) that has a second cladding (3) between the ring core (4) and outer glass region (6) and wherein the only difference between the refractive index profile of the first embodiment (Fig. 2b) and this one (Fig. 3b) is a step between the ring core (4) and second ring core (5), which will not change teachings of the claimed relationships of claim 1 as previously described in relationship the first embodiment.

Prior art which teaches a range within, overlapping, or touching the claimed range anticipates if the prior art range discloses the claimed range with sufficient specificity. When the prior art discloses a range which touches, overlaps or is within the claimed range, but no specific examples falling within the claimed range are disclosed, a case by case determination must be made as to anticipation. In order to anticipate the claims, the claimed subject matter must be disclosed in the reference with "sufficient specificity to constitute an anticipation under the statute." What constitutes a "sufficient specificity" is fact dependent. If the claims are directed to a narrow range, the reference teaches a broad range, and there is evidence of unexpected results within the claimed narrow range, depending on the other facts of the case, it may be reasonable to conclude that the narrow range is not disclosed with "sufficient specificity" to constitute an anticipation of the claims. The unexpected results may also render the claims unobvious. The question of "sufficient specificity" is similar to that of "clearly envisaging" a species from a generic teaching. See MPEP § 2131.02.

***Allowable Subject Matter***

**Claims 8 and 9** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: These claims would be allowable over the prior art of record if rewritten in independent form including all of the limitations of the base claim and any intervening claims because the latter, either alone or in combination, does not disclose nor render obvious a dispersion optimized fiber with the dispersion slope, polarization mode dispersion and mode field diameter in the ranges of claim 8 or a cable cut off wavelength, core concentricity and effective area of claim 9, in combination with the rest of the claimed limitations.

***Response to Arguments***

Applicant's arguments filed 7/17/06 have been fully considered but they are not persuasive. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., none of the argued aspects of the invention on pages 10-13 of the arguments) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Applicant argues

different aspects of the invention in pages 10-13 of the arguments, yet none of these aspects are in claim 1.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

In conclusion, applicant's arguments do not state what limitation in at least claim 1 is missing from the applied reference. None of the aspects of the invention stated in the arguments are found in at least claim 1 and therefore they do not overcome the rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Lepisto whose telephone number is (571) 272-1946. The examiner can normally be reached on M-Th 7:30 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2883

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Ryan Lepisto  
Art Unit 2883  
Date: 10/20/06



Frank Font  
Supervisory Patent Examiner  
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